Applicants

Maureen J. Charron and Ellen B. Katz

Serial No.

09/516,493

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) '

6. (amended) The nucleic acid of Claim 3 which encodes the amino acid sequence of SEQ ID NO:7.

- 7. (amended) The nucleic acid of Claim 6, having the nucleotide sequence of SEQ ID NO:6.
- 8. (amended) The nucleic acid of Claim 4 which encodes the amino acid sequence of SEQ ID NO:10.
- 9. (amended) The nucleic acid of Claim 8, having the nucleotide sequence of SEQ ID NO:9.
- 10. (amended) The nucleic acid of Claim 5 which encodes the amino acid sequence of SEQ ID NO:12.
- 11. (amended) The nucleic acid of Claim 10, having the nucleotide sequence of SEQ ID NO:11.

Please attach at the end of the application pages 1-8 of the Sequence Listing (attached hereto as Exhibit B).

REMARKS

By this Amendment, applicants have amended the specification to refer to sequence identifiers, as required by the Sequence Rules, and to add the Sequence Listing. The amendments to the specification are supported by the application as originally filed. Accordingly, entry of the amendments to the specification is respectfully requested.

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Compliance with Sequence Rules

The June 1, 2001 Office Action and the attached Notice to Comply With Requirements for Patent Applications Containing Nucleotide Sequence and/or Amino Acid Sequence Disclosures (Exhibit A) indicated that the application did not comply with the Sequence Rules. In response thereto, applicants attach herewith Exhibit B, consisting of pages 1-8 of the Sequence Listing. Also enclosed is a computer-readable form containing the Sequence Listing (Exhibit C). Additionally, the specification has been amended to contain the correct sequence identifiers, as required by the Sequence Rules.

The undersigned attorney hereby certifies that the information recorded in computer-readable form is identical to the written Sequence Listing, is supported by the application as filed, and does not introduce new matter into the application as filed. In view of the above-noted amendments and these remarks, applicants respectfully submit that they have complied with the Sequence Rules. Accordingly, entry of the Sequence Listing is respectfully requested.

No fee is deemed necessary in connection with the filing of this Amendment. If any fee is required to preserve the pendency of the application, authorization is hereby given to charge the amount of any such fee to Deposit Account No. 01-1785.

Respectfully submitted,

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By:

Dated: June 29, 2001

New York, New York

Craig J. Arnold

Reg. No. 34,287

SCHEDULE A

REDLINED VERSION

In the Specification:

Please replace the paragraph at page 6, line 26 as follows:

<u>Figure 6</u> illustrates sequence alignment between murine GLUT4 (SEQ ID NO:1) and GLUTx (SEQ ID NO:2). Shaded regions indicate sequence similarity. Boxed regions indicate sequence identity.

Please replace the paragraph at page 6, line 29 as follows:

Figure 7 illustrates sequence alignment between *Saccharomyces* RGT2 (SEQ ID NO:3), SNF3 (SEQ ID NO:4), and GLUTx (SEQ ID NO:5). Shaded regions indicate sequence similarity. Boxed regions indicate sequence identity.

Please replace the paragraph at page 7, line 5 as follows:

<u>Figure 9</u> depicts a partial nucleotide sequence of Hhuman GLUTx (SEQID NO:6). The putative stop is depicted as <u>T G A</u>.

Please replace the paragraph at page 7, line 7 as follows:

Figure 10 depicts the predicted amino acid sequence (SEQ ID NO:7) encoded by the nucleotide sequence of Figure 9 (SEQ ID NO:6). "*" indicates the putative carboxy terminus of the GLUTx protein. The region of sequence following "*" (SEQ ID NO:8) represents a possible alternate carboxy terminus of the human GLUTx protein.

Please replace the paragraph at page 7, line 10 as follows:

Figure 11 depicts a partial nucleotide sequence of rat GLUTx (SEQ ID NO:9).

Please replace the paragraph at page 7, line 11 as follows:

Figure 12 depicts the predicted amino acid sequence (SEQ ID NO:10) encoded by the nucleotide sequence of Figure 11 SEQ ID NO:9.

Please replace the paragraph at page 7, line 13 as follows:

Figure 13 depicts a partial nucleotide sequence of mouse GLUTx (SEQ ID NO.11).

Please replace the paragraph at page 7, line 14 as follows:

<u>Figure 14</u> depicts the predicted amino acid sequence (SEQ ID NO:12) encoded by the nucleotide sequence of Figure 13 SEQ ID NO:11.

Please replace the paragraph at page 38, line 30 as follows:

A polyclonal antibody was generated to the last 11 amino acids of the carboxy-terminus of the GLUTx protein. These amino acids are LEQITAHFEGR (amino acid residues 443 to 453 of SEQ ID NO:7). The antibody was used in Western blot analysis of different tissues from GLUT4 null and wild type mice and of mammary tumors induced by the mouse mammary tumor virus. A specific immunoreactive protein was found to be about 32.6 kD in testis, heart, fat, liver, diaphragm, and soleus muscle in both GLUT4 null and wild type mice. Further analysis revealed that GLUTx protein appears to be more abundant in GLUT4 null liver and testis than in the same wild type tissues. In contrast, the GLUT4 null fat seems to express less GLUTx protein than wild type fat. The

Western blot analysis of the mouse mammary tumor showed an approximately 32.6 kD protein while normal mouse mammary tissue did not appear to have a band in this area.

Please rewrite Claims 6, 7, 8, 9, 10, and 11 as follows:

- 6. (amended) The nucleic acid of Claim 3 which encodes the amino acid sequence for GLUTx shown in Figure 10 of SEQ ID NO:7.
- 7. (amended) The nucleic acid of Claim 6, having the nucleotide sequence for GLUTx as shown in Figure 9 of SEQ ID NO:6.
- 8. (amended) The nucleic acid of Claim 4 which encodes the amino acid sequence for GLUTx shown in Figure 12 of SEQ ID NO:10.
- 9. (amended) The nucleic acid of Claim 8, having the nucleotide sequence for GLUTx as shown in Figure 11 of SEQ ID NO:9.
- 10. (amended) The nucleic acid of Claim 5 which encodes the amino acid sequence for GLUTx shown in Figure 14 of SEQ ID NO.12.
- 11. (amended) The nucleic acid of Claim 10, having the nucleotide sequence for GLUTx as shown in Figure 13 of SEQ ID NO:11.